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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,188	05/01/2001	Kim Fung Lee	75622.P0035	5100

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EXAMINER

HA, DAC V

ART UNIT PAPER NUMBER

2634

DATE MAILED: 06/15/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/847,188

Applicant(s)

LEE, KIM FUNG

Examiner

Dac V. Ha

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10 is/are rejected.
- 7) ☒ Claim(s) 7-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment filed on 03/26/04.

Claim Objections

2. **Claims 7-9** are objected to because of the following informalities: the parameter "s" and "HYB0" in claim 7 should be clearly defined (including what it represents and its domain). Similar issue for "HYBP" in claim 8.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-3, 5** are rejected under 35 U.S.C. 102(e) as being anticipated by Gambuzza (US 6,226,331).

Regarding claim 1, Gambuzza teaches the claimed subject matter as followed.

"a hybrid network having a hybrid input, a receive input, and a hybrid output, wherein the receive input is capacitively coupled to a subscriber line carrying upstream and downstream data signal" (Figure 4, elements 440A and 440B), wherein the paths through R7 and R8 teach "a hybrid input"; the paths through R5 and R6 teach "receive input"; and outputs from 440A and 440B teach "a hybrid output";

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“a driver providing the upstream data signal to the subscriber line and the hybrid input, wherein the driver is capacitively coupled to the hybrid input, wherein the hybrid output provides the extracted downstream data signal from the subscriber line” (Figure 4, elements 430B, 430C).

Regarding claim 2, Gambuzza further teaches the claimed subject matter “wherein the hybrid network resides on an integrated circuit die” in Col. 3, lines 46-48.

Regarding claim 3, Gambuzza further teaches the claimed subject matter “wherein the driver resides on the same integrated circuit die” in Col. 3, lines 46-48.

Regarding claim 5, Gambuzza further teaches the claimed subject matter “wherein the upstream and downstream data signals are multitone modulated data signals” Col. 3, line 20.

4. **Claims 6, 10** are rejected under 35 U.S.C. 102(e) as being anticipated by Hjartarson et al. (US 6,295,343) (hereinafter Hjartarson).

Regarding claim 6, Hjartarson teaches the claimed subject matter “a hybrid network coupled to receive an upstream data signal and a downstream data signal communicated on a subscriber line, the hybrid network extracting the downstream data signal, wherein the hybrid network order is less than or equal to 2” in Figures 6, 7, all elements except elements 407, 407; Col. 7, lines 25-28.

Regarding claim 10, Hjartarson further teaches the claimed subject matter “the hybrid network is tuned to behave substantially as a first order network” in Col. 7, lines 25-28.

Claim Rejections - 35 USC § 103

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Gambuzza.

Regarding claim 4, the claimed subject matter "wherein the hybrid network is a complementary metal oxide semiconductor integrated circuit" would have been obvious to one skilled in the art at the time of the invention since CMOS is the technique of choice for IC.

7. **Claims 11-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hjartarson in view of Gambuzza.

Regarding claim 11, Hjartarson teaches all the claimed subject matter in claim 11, except for the claimed subject matter "wherein the hybrid network resides on an integrated circuit die". However, this claimed subject matter would have been obvious to one skilled in the art, i.e. as taught by Gambuzza in Col. 3, lines 46-48.

Regarding claim 12, the claimed subject matter "wherein the hybrid network is a complementary metal oxide semiconductor integrated circuit" would have been obvious to one skilled in the art at the time of the invention since CMOS is the technique of choice for IC.

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Regarding claim 13, Gambuzza further teaches the claimed subject matter “wherein the upstream and downstream data signals are multitone modulated data signals” Col. 3, line 20.

Allowable Subject Matter

8. **Claims 7-9** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments filed on 03/26/04 have been fully considered but they are not persuasive.

In the REMARKS, page 6, applicant has argued “Applicant notes that ... or 430C.” In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., “the receive input includes both the signal transmitted by the driver and the signal received from the subscriber line”; “The hybrid input is associated with the transmitted signal and the receive input is associated with the signal appearing on the subscriber line”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Claim 1 does not provide any association or differentiation between the “hybrid input”, “receive input” and “hybrid output” as those in applicant's argument. Claim 1 merely recites “a hybrid

network having a hybrid input, a receive input and a hybrid output, wherein the receive input is capacitively coupled to a subscriber line carrying an upstream data signal and a down stream data signal". In Gambuzza, the transmission line is a two-way traffic, therefore, carrying both "upstream data signal and downstream data signal" (Col. 2, lines 57-59). Gambuzza hybrid circuit also provides "hybrid input", "receive input" and "hybrid output" and "the receive input in capacitively coupled to a subscriber line" as explained above (in regarding claim 1).

Pages 7-9 of the REMARKS, applicant has argued "Applicant respectfully traverses ... less than or equal to 2". In applicant's specification, page 2, applicant states "A hybrid circuit, for example, is used to address echoes resulting from using the same two wires for both transmission and reception on the analog channel". Hjartarson discloses a loop (Figure 6, element 404) used for both transmitting and receiving. Hjartarson also address the noise as a result from such transmission (Col. 7, lines 3-9). Further, the "hybrid" network disclosed in Hjartarson comprising first order filters, thus, the "network order is less than or equal to 2".

Page 9, with respect to claims 11-13, applicant has presented the same argument for claim 6, thus, see above.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dac V. Ha whose telephone number is 703-306-5536. The examiner can normally be reached on 5/4.

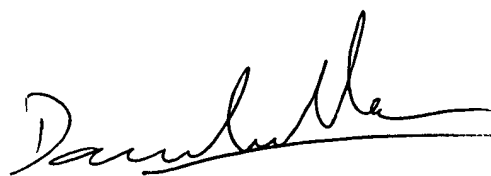
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read "Dac V. Ha", with a horizontal line drawn underneath the signature.

Dac V. Ha
Examiner
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